



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,004	02/08/2006	Francesca Ghigini	41622/AJ/CD	5829
7590 Modiano & Associati Via Meravigli 16 Milano, 20123 ITALY				
EXAMINER				
JANG, CHRISTIAN YONGKYUN				
ART UNIT		PAPER NUMBER		
4153				
MAIL DATE		DELIVERY MODE		
01/24/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/568,004

Applicant(s)

GHIGINI, FRANCESCA

Examiner

CHRISTIAN Y. JANG

Art Unit

4153

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 2/8/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11-15, 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (USP #6,332,867).
3. As to claim 11, Chen discloses the invention substantially as claimed. Chen teaches a device for detecting arterial pressure with high measurement precision (Abstract), comprising a cuff with inflatable chamber (Fig. 2, 30), adapted to be placed around the arm of a patient (col 5, lines 21-24), means for introducing air to inflate said cuff (Fig. 2, 32), and decompression means adapted to decompress said inflatable chamber (Fig. 2, 34), further comprising means adapted to detect and store all the sphygmia pulses generated by the arterial pulsation and to identify the pulses that correspond to appearance and disappearance of wrist beat (Fig. 2, 15, and Fig. 1, 22), detected by means of a technique for detecting sphygmia pulses generated by arterial

Art Unit: 4153

pressure (Fig. 2, 38) that provides for the intervention and subjective judgment of an operator (Fig. 4, 49C').

4. As to claim 12, Chen teaches the device of claim 11, wherein said decompression means of said inflatable chamber comprise a valve for providing constant and time-controlled decompression (Fig. 2, 34).
5. As to claim 13, Chen teaches the device of claim 11, comprising discharge means adapted to completely and instantaneously discharge the inflatable chamber of said cuff (Fig. 2, 34).
6. As to claim 14, Chen teaches the device of claim 11, wherein said means for detecting and storing the sphygmie pulses are connected to data storage means (Fig. 1, 22), which are adapted to store the chart of the sphygmie pulses (col 7, lines 38-42).
7. As to claim 15, Chen teaches the device of claim 11, comprising a display that is adapted to display detected levels of pressure and levels of sphygmie intensity of the pulsations (Fig. 4, 48).
8. As to claim 17, Chen discloses the invention substantially as claimed. Chen teaches a method for detecting arterial pressure (Abstract), comprising the steps of: pumping air into a cuff provided with an inflatable chamber (col 6, lines 22-27); decompressing said inflatable chamber (col 6, lines 27-29); detecting, by means of the intervention and subjective judgment of an operator, the sphygmie pulses that correspond respectively to the appearance and disappearance of the wrist beat (col 6, lines 45-47), further comprising the steps of: detecting and storing all the sphygmie pulses generated by arterial pulsation by using an electronic sensing and storage circuit

Art Unit: 4153

(col 7, lines 47-54); identifying, among said sphygmim pulses, the ones that correspond to the appearance and disappearance of the pulse beat, detected by means of said (note: *no antecedent basis*) stethoscope (col 6, lines 40-44. The examiner considers the pressure sensor to be equivalent to a stethoscope).

9. As to claim 18, Chen teaches the method of claim 17, wherein said step of performing the decompression of said inflatable chamber comprises performing decompression at a controlled and constant rate (col 6, lines 29-31. Chen discloses a cuff that is "controllably deflated by opening evacuation valve under the control of the microprocessor". It is the examiner's position that a constant rate of deflation is inherent to Chen's disclosure).

10. As to claim 19, Chen teaches the method of claim 17, further comprising a step of storing said sphygmim pulses generated by arterial pulsation, in order to allow subsequent analysis of the chart of sphygmim pulses, in order to determine assuredly the pulses that actually correspond to the maximum and minimum values of arterial pressure (col 7, lines 38-42).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 16 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (USP #6,332,867) in view of Barker (USP #5,201,320).

13. As to claim 16, Chen discloses the invention substantially as claimed. Chen teaches all the elements of claim 11, which claim 16 is dependent upon. However, Chen does not disclose a button to be pressed by an operator when the operator detects pulses corresponding to systolic or diastolic pressures.

Barker teaches buttons or switches 32 & 34 (col. 4, lines 39-43) for the purpose of marking off the pressure readings of systolic and diastolic pressures.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chen with the button apparatus taught by Barker in order to simplify operation of the device, to allow the operator to concentrate on determining only the points of systolic or diastolic pressure, without needing to account for the actual pressure readings themselves.

14. As to claim 20, Chen discloses the invention substantially as claimed. Chen teaches all the elements of claim 17, which claim 20 is dependent upon. However, Chen does not disclose a step of pressing on a button at sphygmic pulses corresponding to systolic and diastolic pressure are detected, such that the pressures are "marked" on a digital scale of the device.

Barker teaches buttons or switches 32 & 34 (col. 4, lines 39-43) for the purpose of marking off the pressure readings of systolic and diastolic pressures. In addition, he discloses a first unit 31 which contains two displays 28 & 30 which displays the pressure readings at the systolic and diastolic pressure, thus "marking" the pressures.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to Chen with the step of pressing buttons that "mark" the systolic and diastolic pressure points as taught by Barker in order to simplify operation of the device, to allow the operator to concentrate on determining only the points of systolic or diastolic pressure, without needing to account for the actual pressure readings themselves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTIAN Y. JANG whose telephone number is (571)270-3820. The examiner can normally be reached on Mon. - Thurs. (7AM-5PM) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached on 571-272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CJ

/C. Y. J./

Examiner, Art Unit 4153

1/16/08

/Gary Jackson/

Supervisory Patent Examiner

Art Unit 4153